EXHIBIT 22

CONFIDENTIAL

 1   UNITED STATES DISTRICT COURT

 2   NORTHERN DISTRICT OF CALIFORNIA

 3   SAN FRANCISCO DIVISION

 4

 5   ORACLE AMERICA, INC.,

 6   Plaintiff,

 7   vs.   No. 3:10-cv-03561-WHA

 8   GOOGLE, INC.,

 9   Defendant.

10   _____

11   CONFIDENTIAL

12

13   VIDEOTAPED DEPOSITION OF ANDREW JOHN HALL

14   CONTAINING ATTORNEYS' EYES ONLY PORTIONS

15   San Francisco, California

16   Friday, March 4, 2016

17   Volume I

18

19

20   REPORTED BY:

21   REBECCA L. ROMANO, RPR, CSR No. 12546

22   JOB NO. 2241703

23

24   PAGES 1 - 280

25   PAGES 266 - 279 ARE ATTORNEYS' EYES ONLY

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1   I guess I'm trying to think of that -- not
2   that specific point.
3   Q.   So you have no knowledge whether OEMs
4   have expressed acceptance or rejection, one way or
5   the other, of Android including OpenJDK-based
6   libraries; is that fair?
7   A.   Can you say it again.
8   Q.   You have no -- break it down.
9   You have no knowledge whether OEMs have
10   expressed acceptance over Google's decision to use
11   OpenJDK libraries in Android, right?
12   A.   When you say "acceptance," can you help
13   me -- OEMs' acceptance of their inclusion in
14   Android?
15   I mean, Google included them in Android.
16   So when you say "acceptance," what do you mean by
17   acceptance?
18   Q.   Whether OEMs have expressed any sort of
19   approval or hesitation or concern whether -- that
20   Google is choosing to release part of the core
21   libraries under a copyleft license.
22   A.   I -- I'm trying to remember. So part of
23   my job is obviously being aware of trends and
24   developments in the industry. I don't recall
25   reading OEM reactions to the news of OpenJDK. I

1   think I've read -- been reading others. I
2   don't -- I don't specifically recall reading
3   reactions of OEMs to the inclusion of the OpenJDK.
4   And some of that is going to be that they're not
5   using that version of Android just yet.
6   Q.   In fact, there's no actual version of
7   Android that has OpenJDK in it, right?
8   MR. KWUN: Objection. Form.
9   THE DEPONENT: Yeah, there is. It's
10   available online.
11   Q.   (By Ms. Caridis) Are you familiar with
12   Google's definition of what a version of Android is?
13   A.   Oh, like a major version or a minor
14   version of Android?
15   Q.   Or just a version.
16   MR. KWUN: Objection. Form.
17   THE DEPONENT: So in programming,
18   companies -- different companies use different ways
19   for designating something. It's what they call a
20   major version. So 3.0 would be a major version. A
21   minor version would be 3.1, for example. It's also
22   common projects.
23   They also will have their own
24   conventions. I'm not specifically aware of
25   Android's convention for determining whether

1   products written with?
2   A.   It's -- it's been long enough, I'm not
3   sure, I think it -- again, I think it was either C
4   or C-sharp -- or I'm sorry -- C++.
5   Q.   Do you recall doing any programming in
6   the Java programming language, while at the
7   subsidiary of Raven?
8   A.   No. My experience with Java is solely
9   from personal development, projects on my own time.
10   Q.   Can you tell me about the projects on
11   your own time that you have experienced Java with?
12   A.   Sure. Yeah.
13   So I remember one thing I had done
14   and this -- this is actually pretty representative
15   of the projects that they were -- but one project
16   that really sticks out in my mind was -- I'm a bit
17   of an audiophile so I love music. And I would sign
18   up with different services and -- so Rhapsody, I
19   was on that one for awhile. And on Spotify and
20   other ones.
21   But what would happen is I would build
22   these really long playlists where I'd spend hours
23   and hours and hours on. And then if I wanted to
24   move service from Rhapsody to Spotify, for example,
25   often there wouldn't be a way to move those

1   playlists.
2   And so I remember one project was
3   specifically working with the API of a service -- I
4   developed a little program that would pull all that
5   data out one piece at a time, and then go over to
6   the API, the new service, and put that all data in
7   one at a time. So it was a very simple -- those
8   are type of projects. So if there's something like
9   that, where it's like, wow, I can automate this,
10   make this go much quicker, those -- those sorts of
11   projects.
12   Q.   And did you -- when you were at the --
13   Ohio State --
14   A.   Uh-huh.
15   Q.   -- did you take any courses in Java?
16   A.   I -- not -- I don't think specifically in
17   Java. So they used a academic version of C, is
18   what they called it at the time. It was called
19   Resolve, I believe. Resolve C.
20   I don't remember taking a Java specific
21   class. I -- I don't remember taking one.
22   Q.   Do you remember having any exposure to
23   Java while receiving your undergraduate degree?
24   A.   Yes, but -- yes.
25   Q.   And can you explain to me what you

1 recall?
2   A.   So I definitely recall again, on a
3 personal level, being interested in it. And,
4 actually, that was kind -- I think the timing was
5 right that really the Java announcement -- Java,
6 kind of -- Sun, all these things that were
7 happening, there was a lot of just general
8 awareness. In fact, now that I think about it -- I
9 hadn't thought about this in a while.
10   I started a club at Ohio State that was
11 named Java Squared. There may be a trademark
12 problem -- I don't know -- but it was named Java
13 Squared. And the point was that I -- I felt that
14 technical students at Ohio State really didn't have
15 a good way to meet each other. And so the idea was
16 that people would come to these meetings, technical
17 people would come, and we would sit there and geek
18 out about things like Java.
19   Q.   So is it fair to say that your knowledge
20 of Java more or less comes from being self-taught?
21   A.   No.
22   Q.   And what's wrong with that?
23   A.   So I have a lot of clients now that use
24 Java. And so part of advising them is I -- was --
25 I -- because I had actually been going through and

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1 not -- not choose, I confirm -- this is software that
2 come up.
3   As far as, you know, someone who builds
4 the Android runtime for a living, the software
5 engineer, I would expect that I don't know as much
6 as that person might about the technical aspects.
7   Q.   (By Ms. Caridis) But you explained that in
8 your ordinary course, when counseling clients and
9 understanding their problems, eventually part of your
10 practice is to go back and confirm your understanding
11 with the technical people at the client; is that fair?
12   A.   Correct. Yes.
13   Q.   So -- so you don't -- in -- in your
14 ordinary practice, you do not rely solely on your
15 technical understanding when forming your opinions.
16   You have those understandings confirmed
17 by the client, right?
18   MR. KWUN: Objection. Form.
19   THE DEPONENT: So I have the client
20 provide me with any necessary technical information
21 I need to reach that conclusion.
22   Q.   (By Ms. Caridis) And anything -- any gaps
23 that you fill that you didn't get directly from the
24 client, you eventually confirm with the client, right?
25   MR. KWUN: Objection. Form.

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1   THE DEPONENT: Can you say it again.
2   Q.   (By Ms. Caridis) Any -- so -- so you said
3 that the client provides you with necessary technical
4 information?
5   A.   Right. So any missing technical
6 information I need that I can't get from public
7 sources, I would definitely ask them for that
8 portion of it. And then as you mentioned, I will
9 also usually -- once I have the understanding, I
10 will ask them to confirm. So this is how I think
11 you're using it. Is this right, you know, those
12 sort of things.
13   Q.   Prior to your retention in this case by
14 Google, had you ever worked with or studied the
15 Android source code?
16   A.   For the Android software stack, is what
17 you're referring to?
18   Q.   Yes.
19   A.   I don't -- let me think about it one sec.
20   I don't remember specifically digging
21 through Android source code as part of an analysis.
22   Q.   Did you -- prior to starting work on this
23 case, what level of familiarity would you say you
24 had with the Android stack?
25   MR. KWUN: Objection. Form.

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1   A.   So by the time that I came along and
2 was -- was conducting such diligence, companies had
3 already become more sophisticated than that.
4   Q.   So that would have been in 2000. So by
5 2010, you believe that companies were more
6 sophisticated than just avoiding GPL --
7   A.   I think --
8   Q.   -- software?
9   A.   I apologize.
10   That was my general experience, was that
11 the review process for open source had become more
12 sophisticated than merely saying, are you using
13 GPL, yes or no.
14   Q.   Do you have any sense as to the review
15 process for open source -- the relative
16 sophistication level in 2007?
17   A.   Only by what I've been told by other
18 people who were conducting that review, right.
19   Q.   So you have no firsthand knowledge?
20   A.   Of due diligence -- of open source due
21 diligence? No. No. I mean, that's -- that would
22 have been when I was a patent litigator.
23   Q.   Right.
24   Because you -- in fact, you were not
25 working with open source licensing more than

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1   5 percent of the companies out of those 1 percent of those who have it, right?

2   A.   At Knobbe, I would estimate, yeah.

3   Q.   And what did others tell you about the

4 relative sophistication of open source due

5 diligence in the 2007 time frame?

6   A.   I don't know that we ever broke it down

7 by year like that. So I think we've always

8 discussed it as an evolution of where it came from,

9 when the licenses were first published, to where

10 it's come now. I don't think I ever metered that

11 against a particular year.

12   Q.   Did you meter it against any -- a range

13 of years?

14   A.   I -- I don't think so. I don't think so.

15   Q.   So sitting here today, other than less

16 sophisticated than 2010, you can't describe, in

17 your estimation, the level of sophistication of

18 companies as it relates to GPL compliance in the

19 2007 time frame?

20   MR. KWUN: Objection. Form.

21   THE DEPONENT: I don't have firsthand

22 experience of the level of sophistication in the

23 2007 time frame.

24   Q.   (By Ms. Caridis) So I think we discussed

25 earlier, Google distributes Android in source code

2   A.   Actually, you cut off a portion there.

3 It says, "But when you distribute the same sections

4 as part of a whole which is a work based on the

5 Program."

6   So it has to be a whole that is a

7 derivative work of the program. So not just some

8 abstract whole; it has to be a derivative work.

9   Q.   But the first -- the -- the -- I guess

10 it's the second sentence of that paragraph, says

11 the -- that the identifiable sections of the work

12 are not derived from the program, right?

13   A.   Identifiable sections of the work that

14 are not derived from the program, correct. It says

15 that, yup.

16   Q.   So then if we're talking about class

17 libraries and linking to modules, is it your

18 opinion that this paragraph of section 2 of the

19 GPLv2-CE license would only apply once the class

20 libraries and modules have been linked?

21   MR. KWUN: Objection. Form.

22   THE DEPONENT: I'm sorry. That was a

23 little hard to follow with -- with the

24 hypothetical -- what's there.

25   Can you say it again.